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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,930	12/19/2001	Paul W. Dow	12821.12US01	2558
7590	11/18/2003			EXAMINER TORRES, ALICIA M
Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			ART UNIT 3671	PAPER NUMBER

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/027,930	DOW, PAUL W.
	Examiner	Art Unit
	Alicia M Torres	3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) _____ is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4, 6-13 and 15-22 is/are rejected.
- 7) Claim(s) 5 and 14 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The rounded end of the guard is not disclosed in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 3, 6, 7-9, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Lohmann.
5. In regards to claims 1, 2, 3, and 6, Lohmann discloses a guard for a crop collecting apparatus, the guard comprising:

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a straight elongate member, each end having at least one mounting orifice formed therein; wherein the elongate member is coiled in an arcing configuration when mounted and returns to a straight configuration when removed; and

wherein the guard (6) is adapted for mounting under tension, as per claim 2; and

wherein the mounting orifice (20) has a countersunk portion, as per claim 3; and

wherein the elongate member (6) includes a plurality of mounting orifices (20), as per claim 6.

6. In regards to claims 7-9, Lohmann discloses guard for a crop collecting apparatus wherein the following method is inherent, the method comprising the steps of:

providing a substantially straight elongate guard member (6) having mounting means (20) at a first end and a second end (see figure 3);

mounting the first end to the crop collecting apparatus (1);

coiling the guard member (6) in an arcuate configuration around a portion of the head (11);

mounting the second end to the crop collecting apparatus (1), as per claim 7; and

wherein the guard member (6) is mounted under tension, as per claim 8; and

wherein the mounting means (20) comprise ends with orifices formed therein, as per claim 9.

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7. In regards to claim 17, Lohmann discloses a crop collecting apparatus wherein the following method for accessing a crop collection reel, the reel having at least one guard mounted at a first end and a second end in a flexed condition arcing around a portion of the reel under tension is inherent, the method comprising the steps of:

detaching only the first end of the guard (6) and releasing the first end of the guard (6), wherein the guard (6) returns to a straight configuration upon release of the first end, pulling the guard (6) from around the axle (11) and extending outward from the attached second end.

8. In regards to claims 18 and 19, Lohmann discloses a crop collecting reel for mounting to a crop collection apparatus, the reel comprising:

an arbor (11);

a plurality of tines (3), including tine sets having tines (3) spaced apart radially around the arbor (11), wherein the tine sets are axially spaced along the arbor (11);

a housing comprising a plurality of substantially straight elongate guards (6) intermediate adjacent tine sets, wherein the guards (6) are configured for mounting to the crop collection apparatus in an arcing configuration, as per claim 18; and

wherein each of the guards (6) returns to a substantially straight configuration when one end of the guard (6) is released, as per claim 19.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lohmann and Fritz as applied to claim 1 above, and further in view of Engel.

The device is disclosed as applied to claim 1 above. However, the combination of Lohmann and Fritz fails to disclose wherein the guard comprises a polyethylene member.

Engel discloses a tine stripper (46) wherein the stripper (46) comprises a polyethylene member.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the material of Engel on the guard of Lohmann and Fritz in order to obtain a high wear tolerance.

11. Claims 10-12, 16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallagher et al., hereafter Gallagher, in view of Lohmann.

Gallagher discloses a crop collection apparatus, comprising:

a frame (11);

wheels (8) mounted to the frame (11);

a pick up head (unnumbered) supported on the frame (11) and having a rotatable reel (24);

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a plurality of tines (22) mounted to the reel (24);

a housing (A) extending around the reel (24), including a plurality of guards (12),

wherein the guards (12) are intermediate adjacent tines (22) and alternate with the tines (22).

However, Gallagher fails to disclose wherein the guards comprise substantially straight elongate members bent around the reel when mounted; and

wherein the guards are under tension when mounted, as per claim 11; and

wherein the elongate members include mounting orifices with countersunk portions, as per claim 12; and

wherein the elongate members includes a plurality of mounting orifices, as per claim 16; and

wherein each of the guards returns to a substantially straight configuration when one end of the guard is released, as per claim 20.

Lohmann discloses a similar device wherein the guards (6) comprise substantially straight elongate spring steel strip members bent around the reel when mounted; and

wherein the guards (6) are under tension when mounted, as per claim 11; and

wherein the elongate members (6) include mounting orifices (20) with countersunk portions, as per claim 12; and

wherein the elongate members (6) includes a plurality of mounting orifices, as per claim 16; and

wherein each of the guards (6) returns to a substantially straight configuration when one end of the guard (6) is released, as per claim 20.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the straight elongate members of Lohmann on the device of Gallagher in order to allow for easy maintenance.

12. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohmann in view of Engel.

Lohmann discloses the device as applied to claim 9 above. However, Lohmann fails to disclose wherein the elongate members comprise polyethylene, as per claim 13; and wherein the elongate members comprise ultra-high molecular weight polyethylene, as per claim 15.

Engel discloses a tine stripper (46) wherein the stripper (46) is comprised of ultra-high molecular weight polyethylene (see column 2, lines 16-19).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the material of Engel on the guard of Lohmann in order to obtain high wear tolerance.

13. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lohmann in view of Fritz.

Lohmann discloses the device as applied to claim 1 above. However, Lohmann fails to disclose wherein the substantially straight elongate member has tapered ends.

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Fritz discloses a similar device wherein the ends of the guard are tapered (see figure 3, and column 3, lines 11-19).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the tapered ends of Fritz on the guard apparatus of Lohmann in order to promote lateral tine deflection and permit the tine to be cammed into the appropriate slot.

Response to Arguments

14. Applicant's arguments filed August 21, 2003 have been fully considered but they are not persuasive.

15. In regards to the argument that the spring steel strips of Lohmann are not initially straight and while they provide for some flexure, fail to return to the straight configuration upon removal, the phrase "spring steel" indicates there is room for flexure from an original and natural position. It is known in the art, that steel is manufactured from sheets which are straight and flat. Lohmann teaches the use of spring steel strips which would be manufactured in sheet form and return to their natural straight configuration upon removal from mounting.

Allowable Subject Matter

16. Claims 5 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 703-305-6953. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-872-9306.


Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671